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Under Your Own Power... Parachute

It's evident that the Nation's small and rural law enforcement agencies have a need for low-cost alternatives to planes and helicopters that would allow them to perform aerial surveillance for missing children, lost hikers, and illicit marijuana fields, just like many of their larger counterparts. In response, the Office of Justice Programs' National Institute of Justice (NIJ) has been looking at a number of options and since September 2005 has been conducting field demonstrations with a pair of powered parachutes. NIJ is now ready to expand those demonstrations to include law enforcement agencies.

According to Mike O'Shea, NIJ program manager, powered parachutes are two-seater ultralight craft that fly with a parachute as their wing. Should the engine fail, the craft simply drifts, under the parachute, to the earth. These ultralight craft have a range of about 100 miles and a top speed of about 30 miles per hour. Powered parachutes fly on mid-grade (89 octane) gasoline that can be purchased at any service station, although they can also use the more expensive 100-octane low-lead aircraft fuel commonly found at most airports.

As for flying powered parachutes, O'Shea says they are

relatively easy to learn to fly. "The steering is very simple," he says. "You push the steering bar with your foot to the left to go left, to the right to go right, and you add throttle to go up and less to go down. They have dual controls so they can be flown from either seat."

O'Shea points out that the aircraft can become difficult to launch in winds greater than 15 miles an hour, and although they can be flown in cold weather, pilots/passengers are exposed to the elements and it can be quite cold. However, it is not uncommon for pilots to bundle up and fly in sub-freezing temperatures. Stiffer

winds can sometimes force a craft to land a short distance from where it took off; it took only one such experience for O'Shea to understand why his instructor told him to sit on the empty parachute bag and take it along for the ride. "I had to tuck the chute under the craft to keep it from blowing, walk back to the takeoff point for the bag, and carry the bag back to pack up the chute," he says. "If I had had it with me, I could have packed the chute on the spot and just driven it back across the grass to the storage area."

On the positive side, O'Shea says powered parachutes have the advantage of being able to

take off out of any unimproved field, which would be a distinct advantage in small and rural counties that lack airports.

Also a positive is the cost of a powered parachute. "The cost, around \$15,000, is extremely attractive," O'Shea says. "Many law enforcement agencies—even the larger ones—just can't afford an aircraft, either helicopter or fixed wing. Small and rural agencies used to be able to call on larger agencies and National Guard aircraft, but because of

rising fuel prices and military deployments, these aircraft are only available in the direst of circumstances.

"Ideally, the craft could be used by coalitions of two or three agencies, because not every small and rural agency would need a craft full time; this would further reduce the costs and increase the use of the aircraft."

O'Shea adds that during NIJ's initial field demonstrations (See *Under Your Own Power*, page 10)



It's in the Mail

In the fall of 2001, letters containing anthrax bacteria were sent through the U.S. mail. Twenty-two people were infected with anthrax. Five of them died, including two postal employees. The criminal investigation of those attacks continues.

People were on edge. In the year immediately following the attacks, the U.S. Postal Inspection Service responded to approximately 17,000 incidents of suspicious substances. It became clear that postal inspectors needed additional tools to ensure rapid response capabilities to determine if a substance posed a threat.

"During and immediately after the [anthrax] crisis, any powder in the mail was met with suspicion. People were understandably concerned, and even though there hasn't been a similar attack since, those concerns continue," says Tripp Brinkley, postal inspector/program manager, Dangerous Mail

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of the powered parachutes they were deployed as part of the Hurricane Rita relief efforts in Texas. They were used to survey and photograph damage as well as search for possible looters. The aircraft have also been used to provide aerial photo reconnaissance for the Queen Anne's County (Maryland) Sheriff's Office and have been demonstrated to several other Maryland agencies, including the Annapolis Police Department and the Maryland Department of Natural Resources police.

"NIJ is now ready to conduct additional field demonstrations in other parts of the country, and has received inquiries from areas as diverse as Chowan, North Carolina; Moscow, Idaho; and Imperial County, California, in addition to coalitions of agencies on the Savannah River and on the Texas-Mexico Border," O'Shea says. "Agencies have indicated they would plan to use the craft to look for lost hikers and whitewater rafters, overturned dune buggies, and illicit drug operations and drug smugglers, and to take aerial photos of critical infrastructure such as schools and government buildings."

In addition to powered parachutes, NIJ is looking at ultralight aircraft and aircraft in the new FAA light sport class. "With the advent of the new FAA light sport class, it is possible for an agency or agencies to own an aircraft that costs from \$25,000 to \$75,000 and has operating costs of less than \$25 an hour, thus meeting the low-cost goal of the NIJ Aviation Technology Program," O'Shea says.

O'Shea, who soloed on the ultralight craft after about an hour of instruction, says the program has been fortunate to have the volunteer services of Tim Adelman, a Federal Aviation Administration-certified flight instructor. Adelman, a lawyer in the Annapolis area, has been showing NIJ staff members and law enforcement officers how to fly the aircraft. Another boost to the program has come from the owners of Talisman Airstrip on Maryland's Eastern Shore, who donated storage space and allow free use of the three landing strips.

For more information about NIJ's evaluation of powered parachutes and its Aviation Technology Program, contact Mike O'Shea, 202-305-7954 or Michael.OShea@usdoj.gov.

Editor's Note: Any agency considering the use of powered parachutes for law enforcement activities should first consult with its legal advisors and/or contact the Federal Aviation Administration, 866-835-5322. All ultralight operations are covered by Federal Aviation Regulation Part 103. This regulation can be accessed at safetydata.com/ufire/semnar4.htm. For additional information about ultralight and light sport aviation, visit www.usua.org.

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